

PROJECT DESCRIPTION

THIS PROJECT INVOLVES A MODIFICATION OF THE EXISTING TRAFFIC SIGNAL INSTALLATION AT THE INTERSECTION OF MD 210 (INDIAN HEAD HIGHWAY) AND FORT WASHINGTON ROAD. VEHICULAR SIGNAL HEADS FOR ALL APPROACHES WILL BE CHANGED TO BLACK-FACED SIGNALS. VIDEO DETECTION WILL REPLACE THE EXISTING PRESENCE LOOP DETECTORS FOR THE NORTHBOUND AND SOUTHBOUND LEFT TURN MOVEMENTS AND THE EASTBOUND AND WESTBOUND APPROACHES. MICRO-LOOP PROBES WILL REPLACE THE EXISTING PASSAGE LOOP DETECTORS FOR THE NORTHBOUND AND SOUTHBOUND APPROACHES. MD 210 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

CONTROLLER OPERATION

THE EXISTING EIGHT-PHASE FULLY-ACTUATED NEMA CONTROLLER WILL BE USED. THE CONTROLLER WILL CONTINUE TO OPERATE IN A FOUR-PHASE FULLY-ACTUATED MODE WITH THE NORTHBOUND AND SOUTHBOUND MD 210 APPROACHES RUNNING CONCURRENTLY AND THE EASTBOUND AND WESTBOUND FORT WASHINGTON ROAD APPROACHES RUNNING IN CONSECUTIVE PHASES. EXCLUSIVE PHASING IS PROVIDED FOR THE NORTHBOUND AND SOUTHBOUND LEFT TURN MOVEMENTS. AN ALTERNATE PEDESTRIAN PHASE OPERATES CONCURRENTLY WITH THE WESTBOUND FORT WASHINGTON ROAD MOVEMENT UPON PEDESTRIAN ACTUATION. VIDEO DETECTION INTERFACE EQUIPMENT WILL BE INSTALLED IN THE EXISTING CABINET.

MAINTENANCE OF TRAFFIC

THE FOLLOWING WORK ZONE TRAFFIC CONTROL STANDARDS SHALL BE USED FOR THE TRAFFIC SIGNAL-RELATED CONSTRUCTION AND SHALL SUPPLEMENT THE PROJECT TRAFFIC CONTROL PLAN.

STANDARD NO. 104.00  
STANDARD NO. 104.44-01 (LEFT LANE CLOSURE)  
STANDARD NO. 104.45-01 (RIGHT LANE CLOSURE)  
STANDARD NO. 104.46-01 (CENTRAL LANE CLOSURE)  
STANDARD NO. 104.48-01 (INTERSECTION (LEFT LANE/TURN BAY CLOSURE)  
STANDARD NO. 104.49-01 (SHOULDER WORK)

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS

MR. MAJID SHAKIB  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
(301) 513-7358

MR. AUGUSTINE REBISH  
ASSISTANT DISTRICT ENGINEER - UTILITIES  
(301) 513-7350

MR. RALEIGH MEDLEY  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
(301) 513-7304

CONTACT PERSONS FOR THE OFFICE OF TRAFFIC AND SAFETY  
ARE AS FOLLOWS:

MR. RICHARD DAFF SR.  
DIVISION CHIEF, TRAFFIC OPERATIONS  
410-787-7630

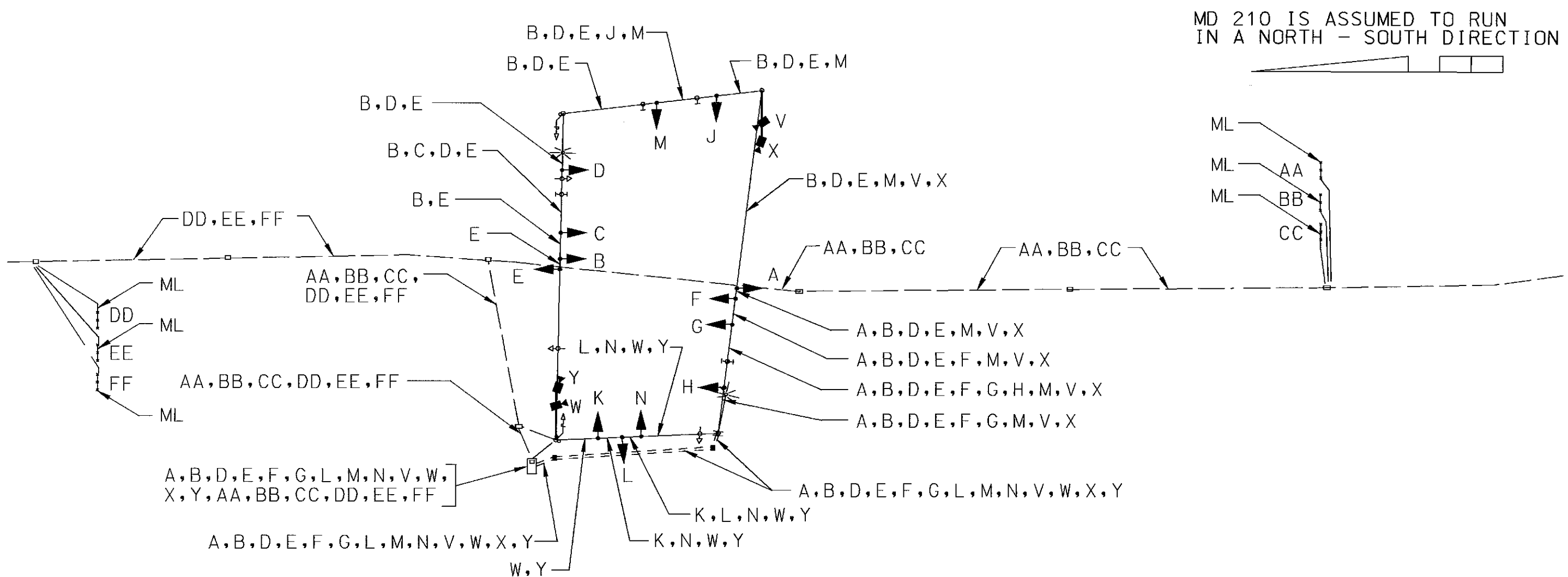
MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS  
410-787-7631

MR. ED RODENHIZER  
CHIEF, SIGNAL OPERATIONS  
410-787-7652

MR. EUGENE BAILEY  
TEAM LEADER SIGN OPERATIONS  
410-787-7676

THE POWER COMPANY REPRESENTATIVE IS:

POTOMAC ELECTRIC POWER COMPANY  
MR. RICHARD CHILCOAT  
(202) 872-2000



WIRING DIAGRAM  
NOT TO SCALE

WIRING LEGEND

A,B,E,F,L,M,N - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
C,D,G,H,J,K - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)  
AA,BB,CC,DD,EE,FF - MICRO-LOOP PROBE LEAD-IN  
V,W,X,Y - VIDEO DETECTION CAMERA CONTROL CABLE  
ML - MICRO-LOOP PROBE SET

WIRING NOTE:

- 1) EXISTING WIRING FOR EQUIPMENT WHICH IS BEING REMOVED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- 2) EXISTING LEAD-IN CABLE FOR LOOP DETECTORS WHICH ARE BEING ABANDONED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- 3) EXISTING WIRING NOT DETAILED SHALL REMAIN IN PLACE.

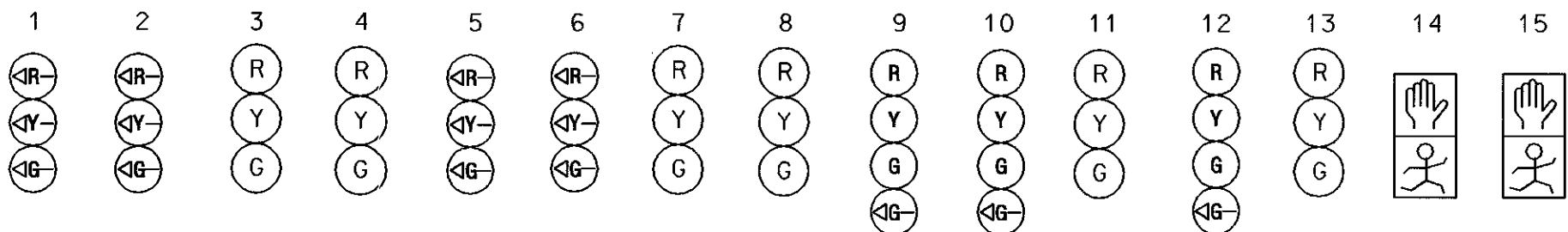
EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION		
ITEM NO.	QUANTITY	DESCRIPTION
9001	1 EA	VIDEO INTERFACE EQUIPMENT
9002	1 EA	RETRO RACK
9003	2 EA	FOUR CHANNEL LOOP DETECTION AMPLIFIER, RACK MOUNT

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR		
ITEM NO.	QUANTITY	DESCRIPTION
2001	2 CY	TEST PIT EXCAVATION
8001	1 LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8002	2 EA	RELOCATE EXISTING OVERHEAD SIGN
8004	2 EA	INSTALL CONDUIT BEND IN EXISTING BASE
8005	60 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8006	10 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8007	15 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8008	30 LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8009	6 EA	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
8010	2 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8011	4 EA	VIDEO DETECTION CAMERA
8012	2 EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
8013	2 EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
8014	1 EA	AS-BUILT FOR TRAFFIC SIGNAL
8015	42 EA	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8016	725 LF	ELECTRICAL CABLE - 5 CONDUCTOR (No 14 AWG)
8017	1950 LF	ELECTRICAL CABLE - 7 CONDUCTOR (No 14 AWG)
8018	250 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)
8019	2 EA	PUSHBUTTON AND SIGN
8020	2 EA	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE

- C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:  
ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART



PHASE 1 & 5	<G->	<G->	R	R	<G->	<G->	R	R	R	R	R	R	R	R	DW	DW	
1 & 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6																
PHASE 1 & 6	<G->	<G->	G	G	<R->	<R->	R	R	R	R	R	R	R	R	DW	DW	
1 & 6 CHANGE	<Y->	<Y->	Y	Y	<R->	<R->	R	R	R	R	R	R	R	R	DW	DW	
PHASE 2 & 5	<R->	<R->	R	R	<G->	<G->	G	G	R	R	R	R	R	R	DW	DW	
2 & 5 CHANGE	<R->	<R->	R	R	<Y->	<Y->	Y	Y	R	R	R	R	R	R	DW	DW	
PHASE 2 & 6	<R->	<R->	G	G	<R->	<R->	G	G	R	R	R	R	R	R	W	W	
2 & 6 CHANGE	<R->	<R->	Y	Y	<R->	<R->	Y	Y	R	R	R	R	R	R	DW	DW	
PHASE 3	<R->	<R->	R	R	<R->	<R->	R	R	R	R	R	R	<G->	G	DW	DW	
3 CHANGE	<R->	<R->	R	R	<R->	<R->	R	R	R	R	R	R	Y	Y	DW	DW	
PHASE 4	<R->	<R->	R	R	<R->	<R->	R	R	<G->	<G->	G	G	R	R	DW	DW	
4 CHANGE	<R->	<R->	R	R	<R->	<R->	R	R	Y	Y	Y	Y	R	R	DW	DW	
ALT. 3	<R->	<R->	R	R	<R->	<R->	R	R	R	R	R	<G->	G	G	W	W	
PED. CLEAR	<R->	<R->	R	R	<R->	<R->	R	R	R	R	R	<G->	G	G	FL/DW	FL/DW	
ALT. 3 CHANGE	<R->	<R->	R	R	<R->	<R->	R	R	R	R	R	Y	Y	Y	DW	DW	
FLASHING OPERATION	FL/<R->	FL/<R->	FL/Y	FL/Y	FL/<R->	FL/<R->	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	

TSP-6



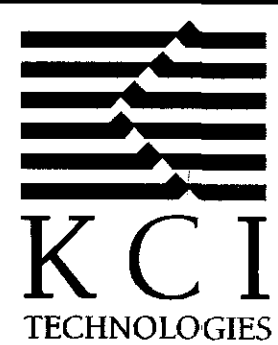
MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
GENERAL INFORMATION SHEET  
MD 210 (INDIAN HEAD HIGHWAY) AT  
FORT WASHINGTON ROAD

DRAWN BY: J. LAWRENCE  
CHECKED BY: A. HOTTENSTEIN  
SCALE: NONE  
DATE: 10/02

F.A.P. NO.  
S.H.A. NO. PG409A21  
COUNTY: PRINCE GEORGE'S  
LOC MILE: 16021008.97

TS NO.  
104IE-GI  
T.I.M.S. NO.  
F295

SHEET NO.  
2 OF 2



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